

In the Claims:

1. (Currently Amended) A method for provisioning a span for digital services, comprising:

creating one or more segment templates, each segment template created to address one or more problems associated with span design, wherein each segment template represents a specific combination of network elements;

receiving an order for the digital services via a computing device;

using order data to obtain an assignment of components for the digital services;

using the order data and the assignment of components to obtain equipment data;

and

identifying one or more problems related to a span design for the order; and
the computing device creating the span design by selecting the one or more segment templates that address the one or more problems identified for the span design for the order

using the order data, the assignment of components, and the equipment data to create a span design for the provision of digital services, the span design being created by selecting from a hierarchy of one or more templates, the hierarchy comprising one or more of: element templates, segment templates and architecture templates;

wherein an element template represents a singular device that is defined by a function of the singular device and is later selected for inclusion into the span design based at least in part on the function of the singular device;

a segment template represents a specific combination of one or more element templates that is defined, and later selected for the span design, by a problem that the segment template was created to address; and

an architecture template represents a specific combination of one or more element templates and segment templates that is defined, and later selected for the span design, by a set of problems that the architecture template was created to address.

2. (Original) The method of Claim 1, further comprising conducting an administrative

review of the span design.

3-5. (Cancelled)

6. (Original) The method of Claim 1, wherein each component conforms to one or more rules.

7. (Original) The method of Claim 2, wherein conducting the administrative review of the span design. comprises checking whether each component conforms to one or more rules.

8. (Currently Amended) A method for creating a span design for digital services, comprising:

developing a hierarchy of one or more templates for use in creating span designs, the hierarchy comprising: element templates, segment templates and/or architecture templates,

wherein an element template represents a singular device that is defined by a function of the singular device,

a segment template represents a specific combination of one or more element templates that is defined by a problem that the segment template was created to address, and

an architecture template represents a specific combination of one or more element templates and segment templates that is defined by a set of problems that the architecture template was created to address;

receiving an order for digital services via a computing device;
identifying one or more problems related to a span design for the order; and
the computing device using order data to select one or more of the templates as a span design for the order,

wherein an element template is selected for the span design based on the function of the device,

a segment template is selected for the span design based on at least one of the identified one or more problems corresponding to the problem that the segment template

was created to address, and

an architecture template is selected for the span design based on a set of the identified one or more problems corresponding to the set of problems that the architecture template was created to address.

9-11. (Cancelled)

12. (Original) The method of Claim 8, wherein using the order data to select the one or more templates as the span design for the order comprises: using the order data and an assignment of components to select the one or more templates as the span design for the order.

13. (Original) The method of Claim 12, wherein using the order data and the assignment of components to select the one or more templates as the span design for the order comprises:

using the order data, the assignment of components, and equipment data to select the one or more templates as the span design for the order.

14. (Original) The method of Claim 9, wherein each component conforms to one or more rules.

15. (Currently Amended) A system for the provision of a span design for digital services, comprising:

an assignment control system (ACS) executing within one or more computing devices;

an inventory module (IM) executing within the one or more computing devices;

and

a main server,

wherein the main server receives an order for the digital services from a user and provides order data from the order to the assignment control system (ACS),

wherein the main server receives assignment data from the ACS, the assignment data identifying one or more components for the digital services, each component being associated with one or more specific problems concerning the provision of the digital services and a device functionality, and forwards the assignment data to an inventory module (IM) which uses the assignment data to determine equipment data based at least in part on the assignment data, and

wherein the main server receives the equipment data from the IM and processes the order data, the assignment data, and the equipment data to create the span design for the digital services by selecting a combination of one or more components based on the one or more specific problems and device functionalities concerning the provision of the digital services being ordered one or more templates, each template representing a combination of network elements, each template defined by one or more common problems associated with span design that the template was created to address, and the selection of the one or more templates based on one or more problems of a span design for the order corresponding to the one or more common problems that the template was created to address.

16. (Cancelled)

17. (Original) The system of Claim 16, wherein the templates comprise:

- one or more element templates;
- one or more segment templates;
- or one or more architecture templates.

18. (Original) The system of Claim 16, wherein a template comprises a representation of the one or more components for the digital services.

19. (Original) The system of Claim 15, wherein components used for implementation of the digital services are hierarchically organized based on elements, segments, and/or

architectures.

20. (Original) The system of Claim 19, wherein each of the components comply with one or more rules.